Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

R-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY

R-111EW HOWLINGLATORE

3600: Research, Development, Test & Evaluation, Air Force

PE 0605807F: Test and Evaluation Support

BA 6: RDT&E Management Support

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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
Total Program Element	752.328	704.475	722.071	-	722.071	701.000	702.979	716.873	725.979	Continuing	Continuing		
6606TG: 46 Test Group	32.095	31.129	31.442	-	31.442	31.592	32.024	32.509	33.195	Continuing	Continuing		
6606TS: Test and Evaluation Support	720.233	673.346	690.629	-	690.629	669.408	670.955	684.364	692.784	Continuing	Continuing		

A. Mission Description and Budget Item Justification

Test facilities, capabilities and resources operated through this program include wind tunnels, rocket and jet engine test cells, armament test ranges, hardware-in-the-loop test facilities, climatic test facilities, avionics test facilities, aircraft testbeds, dry lakebed landing sites, instrumented test ranges, civilian payroll, and contractor services. It also provides resources for maintaining and modifying as required Air Force Materiel Command (AFMC) assigned test and test support coded aircraft. No acquisition contracts are funded from this program; test support contracts for services and supplies and equipment are predominantly awarded on the basis of full and open competition.

This program is in Budget Activity 6, RDT&E Management Support, because this budget activity includes research, development, test, and evaluation efforts and funds to sustain and/or modernize the installations or operations required for general research, development, test and evaluation.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	759.868	654.475	578.997	-	578.997
Current President's Budget	752.328	704.475	722.071	-	722.071
Total Adjustments	-7.540	50.000	143.074	-	143.074
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	50.000			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
 SBIR/STTR Transfer 	-	-			
 Other Adjustments 	-7.540	-	143.074	-	143.074

Change Summary Explanation

FY11: The following decreases: Cong General Reductions of -\$3.8M, FFRDC of -\$2.0K, and \$-3.7M civ pay are reflected in the Other Adjustment Row.

FY12: \$50M Congressional add for restoral of civilian pay as a result of an FY12PB action.

PE 0605807F: Test and Evaluation Support

Air Force

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force 3A 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605807F: Test and Evaluation Support	
	positions and \$46.8M adjustment to align fund	

PE 0605807F: *Test and Evaluation Support* Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force 6606TG: 46 Test Group PE 0605807F: Test and Evaluation Support BA 6: RDT&E Management Support FY 2013 FY 2013 FY 2013 Cost To COST (\$ in Millions) FY 2011 FY 2012 OCO Total FY 2014 FY 2015 FY 2016 FY 2017 Complete | Total Cost Base 6606TG: 46 Test Group 32.095 31.129 31.442 31.442 31.592 32.024 32.509 33.195 Continuing Continuing

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A. Mission Description and Budget Item Justification

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Quantity of RDT&E Articles

Project infrastructure support is provided for the unique capabilities of the 46th Test Group (TG) facilities: Central Inertial Guidance Test Facility (CIGTF/746th Test Squadron), the Holloman High Speed Test Track (HHSTT/846th Test Squadron) and the National Radar Cross Section (RCS) Test Facility (NRTF/781st Test Squadron), the 586th Flight Test Squadron Detachment 1 (Det 1), 46 TG Operating Location (46 TG OL-AA) at Kirtland AFB, and 46 TG Operation Location (46 TG OL-AC) at Wright-Patterson AFB. CIGTF provides independent test and evaluation of inertial, Global Positioning System, and integrated systems used for aircraft navigation and missile guidance systems, including vulnerability to electronic interference. HHSTT capabilities include full-scale testing in flight environments, realistic live-fire simulations, test item and target fragment recovery, and precision trajectory analysis and high speed photography. NRTF provides radar cross section (RCS) monostatic and bistatic amplitude and phase measurements, antenna pattern measurements, glint and near field measurements for low observable targets. Det 1 provides the liaison function for coordinating and scheduling all US Air Force test and training operations at White Sands Missile Range (WSMR). OL-AA provides test support for the Air Force Research Lab (AFRL) Directed Energy Division. The 586th Flight Test Squadron executes flight test and test support for advanced avionics and weapons development of joint, international and commercial test programs. The 46 TG OL-AC includes the Landing Gear Test Facility (LGTF) with capabilities such as variable and fixed inertia dynamometers, compression/tension load applicators, 4 drop towers, a burst pit and a dynamic load simulator. The 46th TG support services contracts are awarded on the basis of full and open competition.

This program is in Budget Activity 6, RDT&E Management Support, because this budget activity includes research, development, test and evaluation efforts and funds to sustain and/or modernize the installations or operations required for general research, development, test and evaluation.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: 46th Test Group	32.095	31.129	31.442	
Description: Provide infrastructure at the 46th Test Group (TG) to support testing of DoD, other Government Agencies, foreign military sales, and commercial weapon systems.				
FY 2011 Accomplishments: Total consists of utilities, contractor services, and civilian pay.				
FY 2012 Plans: Total consists of utilities, contractor services, and civilian pay.				
FY 2013 Plans:				

PE 0605807F: Test and Evaluation Support

Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force

R-1 ITEM NOMENCLATURE

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

PROJECT

3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support

PE 0605807F: Test and Evaluation Support

6606TG: 46 Test Group

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Total consists of utilities, contractor services, and civilian pay.			
Accomplishments/Planned Programs Subtotals	32.095	31.129	31.442

C. Other Program Funding Summary (\$ in Millions)

C. Other Program Funding Summar	y (ə iii iviiiii	<u> </u>									
			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<u>Base</u>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
 PE 0604256F, Threat 	24.805	22.420	22.812	0.000	22.812	20.081	19.076	20.450	20.523	Continuing	Continuing
Simulator De: Threat Simulator											
Development											
 PE 0604759F, Major Test and 	59.469	62.206	42.236	0.000	42.236	43.044	42.899	46.198	47.688	Continuing	Continuing
Eval: Major T&E Investment											
 PE 0605976F, Facility 	46.091	44.547	42.597	0.000	42.597	35.046	43.815	26.899	29.067	Continuing	Continuing
Restoratio: Facility Restoration											
and Modernization											
 PE 0605978F, Facility 	27.438	27.953	27.301	0.000	27.301	23.849	28.871	24.282	24.599	Continuing	Continuing
Sustainmen: Facility Sustainment											

D. Acquisition Strategy

Not applicable

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

PE 0605807F: Test and Evaluation Support

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Exhibit R-2A, RDT&E Project Justification:	PB 2013 Air F	orce					DATE: February 2012					
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM N	IOMENCLA [*]	TURE		PROJECT							
3600: Research, Development, Test & Evalua BA 6: RDT&E Management Support	PE 060580	7F: Test and	Evaluation S	Support	6606TS: <i>Te</i>	st and Evalu	uation Suppo	rt				

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
6606TS: Test and Evaluation Support	720.233	673.346	690.629	-	690.629	669.408	670.955	684.364	692.784	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides resources to operate the Air Force test activities which are included in the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB). Test facilities/capabilities operated through this program include wind tunnels, rocket and jet engine test cells, hypersonic and subsonic testing, modeling and simulation, technology, limited space environmental simulation chambers, armament test ranges, hardware-in-the-loop test facilities, climatic test facilities, avionics test facilities, aircraft testbeds, dry lakebed landing sites, instrumented test ranges, and test aircraft maintenance, as well as USAF Test Pilot School. Test and Evaluation (T&E) Support funds institutional test infrastructure activities including: Command and supervisory staffs; supply stocks; maintenance, repair, and replacement of worn or obsolete test equipment and facilities; test infrastructure for data collection, transmission, reduction, and analysis; civilian salaries; temporary duty travel; range operations and material support contract costs for hardware and software engineering and maintenance; and minor improvement and modernization projects. It also funds institutional test aircraft depot level maintenance such as: Programmed Depot Maintenance (PDM), the calendar-based cyclic scheduling of aircraft into depots for update/inspection; modifications and any other depot level repairs required by the aircraft System Program Directors (SPD); engine overhauls; depot-provided area assistance; and assorted ground support equipment overhauls. Three major Air Force test centers are supported by this project: (1) Arnold Engineering and Development Center (AEDC), located at Arnold Air Force Base (AFB), TN, whose institutional test infrastructure supports operations of the largest complex of ground test facilities in the world (includes transonic, supersonic, and hypersonic wind tunnels; rocket motor and turbine engine test cells; space environmental test chambers, hyperballistic ranges; and other specialized facilities). Included are operations at the National Full-Scale Aerodynamic Complex (NFAC) located at NASA's AMES Research Center, California as well as operations at Tunnel 9 located at White Oak, Maryland.(2) Air Force Flight Test Center (AFFTC), located at Edwards AFB, CA, whose institutional test infrastructure supports weapons system development and operational test and evaluation for aircraft, aircraft subsystems and aircraft weapon systems, aerospace research vehicles, unmanned miniature vehicles, cruise missiles, parachute delivery/recovery systems, cargo handling systems, communications, information operations, and Electronic Warfare (EW) systems for DoD and allied forces. The AFFTC mission includes the USAF Test Pilot School. (3) Air Armament Center (AAC) 46th Test Wing (TW) located at Eglin AFB, FL, is a joint test and training complex of 724 square miles of land area, and approximately 123,000 square miles of water area. AAC 46TW provides the institutional test infrastructure required to conduct developmental and operational test and evaluation of non-nuclear air armaments (including aircraft guns, ammunition, and air-to-surface and air-to-air guided munitions); Command, Control, Communications, Computers and Intelligence/Surveillance/Reconnaissance (C4ISR) systems; target acquisition and weapon delivery systems; multi-service climatic simulation capability; and special operations aircraft systems. AAC 46TW provides a scientific test process that supports the development, production, sustainment, and enhancement of munitions systems that support tri-service digital weapons development. T&E support services contracts are awarded on the basis of full and open competition.

This program is in Budget Activity 6, RDT&E Management Support, because this budget activity includes research, development, test and evaluation efforts, and funds to sustain and/or modernize the installations or operations required for general research, development, and test and evaluation.

PE 0605807F: Test and Evaluation Support

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force			DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support	PROJECT 6606TS: 7	ECT 'S: Test and Evaluation Support			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Title: AEDC			155.309	152.049	162.292
Description: Provide infrastructure to support testing of DoD, othe systems at Arnold Engineering and Development Center (AEDC).	r Government Agencies, FMS and commercial weapo	on			
FY 2011 Accomplishments: Total consists of utilities, contractor services, and civilian pay.					
FY 2012 Plans: Total consists of utilities, contractor services, and civilian pay. Dec	rease in FY 2012 due to manpower reduction.				
FY 2013 Plans: Total consists of utilities, contractor services, and civilian pay. AdjuT&E portfolio for proper execution.	ustment is a result of aligning funds between PEs with	in the			
Title: AFFTC			379.640	357.138	332.00
Description: Continue to provide institutional test infrastructure sulto operate the USAF Test Pilot School.	pport at the Air Force Flight Test Center (AFFTC) and	I continue			
FY 2011 Accomplishments: Total consists of utilities, contractor services, civilian pay, and aircraft.	aft flying costs.				
FY 2012 Plans: Total consists of utilities, contractor services, civilian pay, and aircra	aft flying costs. Decrease in FY12 due to manpower	reduction.			
FY 2013 Plans: Total consists of utilities, contractor services, flight test operations a funds within the T&E portfolio for proper execution.	and support and civilian pay. Adjustment is a result o	f aligning			
Title: 46th Test Wing			185.284	164.159	196.336
Description: Continue institutional test infrastructure support at 46	th Test Wing (TW) for non-nuclear air armaments.				
FY 2011 Accomplishments: Total consists of utilities, contractor services, civilian pay, and aircraft.	aft flying costs.				
FY 2012 Plans:					

PE 0605807F: *Test and Evaluation Support* Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0605807F: Test and Evaluation Support 6606TS: Test and Evaluation Support BA 6: RDT&E Management Support

B. Accomplishments/Planned Programs (\$ in Millions)

Total consists of utilities, contractor services, civilian pay, and aircraft flying costs. Decrease in FY 2012 due to manpower reduction.

FY 2013 Plans:

Total consists of utilities, contractor services, flight test operations and support, and civilian pay. Adjustment is a result of aligning funds within the T&E portfolio for proper execution.

> **Accomplishments/Planned Programs Subtotals** 720.233 673.346 690.629

FY 2011

FY 2012

FY 2013

C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013					Cost To	
Line Item	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
 PE 0604256F, Threat 	24.805	22.420	22.812	0.000	22.812	20.081	19.076	20.450	20.523	Continuing	Continuing
Simulator De: Threat Simulator											
Development											
 PE 0604759F, Major Test and 	59.469	62.206	42.236	0.000	42.236	43.044	42.899	46.198	47.688	Continuing	Continuing
Eval: Major T&E Investment											
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Restoratio: Facility Restoration											
and Modernization											
 PE 0605978F, Facility 	27.438	27.953	27.301	0.000	27.301	23.849	28.871	24.282	24.599	Continuing	Continuing
Sustainmen: Facility Sustainment											

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

PE 0605807F: Test and Evaluation Support Air Force

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